# **GNFAC** Avalanche Forecast for Sun Dec 30, 2018

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast issued on Sunday, December 30<sup>th</sup> at 7:15 a.m. Today's forecast is sponsored by **Grizzly Outfitters** and **The Friends of the Avalanche Center**. This forecast does not apply to operating ski areas.

#### ISSUED ON DECEMBER 30 2018 at 5:00 a.m.

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the Lionhead area near west Yellowstone, southern Gallatin Range, southern Madison Range and the Centennial Range. New snow and strong wind are forming unstable drifts on a weak snowpack. Up to a foot of snow has fallen with more expected today. The avalanche danger is rated **TIGH** on all slopes. Natural and human triggered avalanches are likely. Avalanche terrain and avalanche runout zones should be avoided.

This warning will either expire or be updated by 6:00 a.m. on December 31, 2018.

#### Mountain Weather

Since yesterday morning, 11" of low density snow fell at Lionhead Ridge near West Yellowstone and 3-6" fell elsewhere. Wind has been out of the west to southwest at 15-25 mph with gust of 40-50 mph. This morning, temperatures range from the single digits to mid-20s F. Today, a cold front will decrease temperatures into the teens and single digits F. Wind will be 30-40 mph and shift northwest this afternoon. By this evening, the mountains will get 6-10" of low density snow with over a foot possible near West Yellowstone and Cooke City.

Snowpack and Avalanche Discussion



Southern Madison Southern Gallatin Lionhead Range Island Park

# **Avalanche Warning**

The mountains near West Yellowstone, the southern Gallatin Range and southern Madison Range have a weak and unstable snowpack. On Friday, we toured near Hebgen Lake and found two feet of unsupportive, sugary snow on the ground (video, photo). New snow and strong wind today will form unstable slabs on this weak snowpack. Natural and human triggered avalanches are likely. Large and dangerous avalanches can be triggered from flat terrain below steep slopes. Small, steep terrain can be especially deadly, like confined gullies where avalanches can pile debris many feet deep. Today, avalanche danger is rated HIGH on all slopes. Avoid all steep slopes and low angle terrain below (avalanche runout zones).



Since Friday, the mountains near Bozeman and Big Sky got 8-12" of low density snow equal to .4-.6" of snow water equivalent (SWE). Yesterday, strong wind drifted this snow into slabs that easily collapsed and cracked under the weight of skiers (**photo**). More snow and wind today will increase the size of these slabs and they remain easy to trigger. This new and wind-drifted snow will not add a lot of weight to a generally strong snowpack, and avalanches breaking deeper than the new snow are unlikely. Today, avalanches are easy to trigger on wind loaded slopes which have a <u>CONSIDERABLE</u> avalanche danger. On non-wind loaded slopes, avalanches of new snow are possible and avalanche danger is <u>MODERATE</u>.



The mountains near Cooke City got less snow than the rest of the area, but the snowpack has buried weak layers and more snow is expected today. A layer of facets 1-1.5' below the surface is capable of producing avalanches. Doug found this layer last week (<u>video</u>, <u>photo</u>), and on Friday a snowmobiler triggered an avalanche that broke on this layer (<u>photo</u>). On slopes with less than three feet of snow, the snowpack is weak and sugary to the ground (<u>video</u>). Today, avalanches are easy to trigger where new snow is drifted into fresh slabs on this weak snowpack. Avoid travel on steep wind loaded slopes today, which have a <u>CONSIDERABLE</u> avalanche danger. On non-wind loaded slopes avalanches are possible to trigger and avalanche danger is <u>MODERATE</u>. Danger will rise to <u>CONSIDERABLE</u> on all slopes if snowfall is heavy today.

If you get out and have any avalanche or snowpack observations to share, contact us via our <u>website</u>, email ( mtavalanche@gmail.com), phone (406-587-6984), or Instagram (#gnfacobs).

## New webpage dedicated to the Centennial Range in Idaho and Montana

After last season's <u>two snowmobiler avalanche fatalities on Reas Peak</u> in the Centennial Range we created a <u>webpage</u> so riders could get good, relevant information regarding snowpack and avalanches. Although the Centennial Range is not part of the Gallatin National Forest Avalanche Center's forecast area, we are the closest avalanche center and have valuable information to share. **More...** 

## **Upcoming Avalanche Education and Events**

Our education calendar is full of awareness lectures and field courses. Check it out: **Events and Education Calendar.** 

#### **BOZEMAN**

January 2, Avalanche Awareness, 6-7:30 p.m. at REI, Bozeman. Pre-register at https://www.rei.com/events.

January 8, Women's Specific Avalanche Awareness, 6:30-8 p.m. Story Mill Park, Bozeman.

January 9, 1-hr Avalanche Awareness, 7-8 p.m. Spire Climbing Center, Bozeman.

January 16, 17 and 19 or 20, Intro to Avalanches w/ Field Day, Info and Register Here.

January 23, 24 and 26, Advanced Avalanche Workshop w/ Field Day, Info and Register Here.

## WEST YELLOWSTONE

January 12 and 26, 1-hr Avalanche Awareness for Snowmobilers, 7-8 p.m. Holiday Inn West Yellowstone.

### DILLON

January 22, 1-hr Avalanche Awareness, 6:30-7:30 p.m. U.M. Western Library.

### **BILLINGS**

January 22, 1-hr Avalanche Awareness, 6-7 p.m. The Base Camp, Billings

### COOKE CITY

Every Friday and Saturday, **Rescue Training and Snowpack Update.** Friday 6:30-7:30 p.m. at the Soda Butte Lodge. Saturday anytime between 10-2 @ Round Lake.